

Summary

- 5 A polarization mode dispersion (PMD) controller device for controlling the state of polarization of an optical light wave comprising a dispersion compensation unit (2; 25; 40) and an adaptation control unit (6; 28; 44), wherein the dispersion compensation unit (2; 25; 40) comprises a multitude of compensation stages processing the optical light wave, and wherein the adaptation control unit (6; 28; 44) controls the dispersion compensation unit (2; 25; 40) is characterized in that at least one feed-forward signal tap (4; 26a-26c, 73a-73c) is provided tapping the optical light wave inserted into one of the compensation stages, that the feed-forward signal(s) is(are) fed into a distortion analyzer unit (5; 27; 66) and that the distortion analyzer unit (5; 27; 66) provides the adaptation control unit (6; 28; 44) with information about the incoming optical light wave. It accelerates the adaptation speed and lowers the costs of a high-speed PMD controller device.
- 10
- 15